

IN THE CLAIMS

Claim 1 has been amended as follows:

1. (Currently amended) A nerve stimulation device comprising:
a pulse generator which generates stimulation pulses each having a shape and an energy content;
an electrode arrangement connected to the pulse generator adapted to interact with a living subject to deliver the stimulation pulses to stimulate the phrenic nerve;
an esophageal electrode adapted for insertion in the esophagus of the living subject for obtaining measurement signals;
a signal analyzer connected to the esophageal electrode for filtering myoelectrical signals originating from the diaphragm of the living subject out of the measurement signals; and
a regulating unit connected to the signal analyzer and to the pulse generator for regulating the pulse generator dependent on the myo-electrical signals by varying at least one of said shape and said energy content of said stimulation pulses.
2. (Original) A nerve stimulation device as claimed in claim 1 further comprising a monitoring unit adapted to interact with the living subject for monitoring breathing of the living subject and which generates a monitoring unit output supplied to said regulating unit, said regulating unit regulating the pulse generator dependent on said monitoring unit output as well as dependent on said myo-electrical signals.

3. (Original) A nerve stimulation device as claimed in claim 2 wherein said monitoring unit comprising a breathing detector selected from the group consisting of an external ventilator, a spirometer, an impedance measurement arrangement, a thorax circumference measurement arrangement, and a gas analyzer.

4. (Original) A nerve stimulation device as claimed in claim 1 wherein said signal analyzer also filters electrocardiographic signals out of said measurement signals, and wherein said regulating unit regulates said pulse generator dependent on said electrocardiographic signals as well as dependent on said myo-electrical signals.

5. (Original) A nerve stimulation device as claimed in claim 1 further comprising a cardiac monitoring device adapted to interact with the living subject to obtain cardiac signals, said regulating unit being connected to said cardiac monitoring unit and regulating said pulse generator dependent on said cardiac signals as well as dependent on said myo-electrical signals.

6. (Original) A nerve stimulation device as claimed in claim 1 wherein said electrode arrangement comprises a plurality of electrode leads and wherein said pulse generator is connected to said electrode arrangement via an output interface comprising a plurality of channels, with one channel for each electrode lead, and wherein said regulating unit regulates said pulse generator to individually control delivery of stimulation pulses via the respective electrode leads.

Please add the following new claims:

7. (New) A nerve stimulation device comprising:

a pulse generator which generates stimulation pulses;

an electrode arrangement connected to the pulse generator adapted to interact with a living subject to deliver the stimulation pulses to stimulate the phrenic nerve;

a signal detector adapted to obtain an electrical signal from the living subject indicative of a degree of stimulation of the vagus nerve of the living subject associated with the stimulation of the phrenic nerve by said stimulation pulses; and

a regulating unit connected to said signal detector and to said pulse generator for regulating the pulse generator dependent on the electrical signal to reduce said degree of stimulation of the vagus nerve by said stimulation pulses.

8. (New) A nerve stimulation device as claimed in claim 7 wherein said signal detector is a cardiac signal detector, and wherein said electrical signal is an ECG signal.

9. (New) A nerve stimulation device as claimed in claim 7 wherein said signal detector comprises:

an esophageal electrode adapted for insertion in the esophagus of the living subject for obtaining measurement signals; and

a signal analyzer connected to the esophageal electrode for filtering an ECG signal, as said electrical signal, from said measurement signals.